GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

STARRED QUESTION NO:180
ANSWERED ON:09.03.2007
INVESTMENT IN NANO ELECTRONIC AREA
Reddy Shri Magunta Sreenivasulu

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) the achievements made by the country in nano-technology and how does that compare with the other leading countries;

(b) whether the Government is taking any investment decision in the nano- electronic area; and

(c) if so, the details thereof ?

Answer

MINISTER OF SCIENCE AND TECHNOLOGY AND MINISTER OF EARTH SCIENCES (KAPIL SIBAL)

(a)to(c) A statement is laid on the Table of the House.

STATEMENT AS REFERRED IN REPLY TO PARTS (a) to (c) OF LOK SABHA STARRED QUESTION NO. 180 FOR 09.03.2007 REGARDING "INVESTMENT IN NANO-ELECTRONIC AREA"

(a): The Government has a comprehensive programme to promote various facets of Nano Science and Technology. Over 130 research projects have been funded. About 20 centres of excellence on nano science and nano technology in key areas of research namely, bio-mems, tissue engineering, drug delivery, functional materials, smart textiles, etc. have been established. Some joint institution-industry linked projects focusing on specific technology application areas have also been launched. A number of post-doctoral fellowships have been awarded. Several national and international conferences, schools, etc. have been organized.The Government has spent approximately Rs. 350 crore over the past 5 years to promote R&D in this area. A major national-level review of the nano programme was organized recently at Hyderabad where several interesting and promising results were reported. Our investments and achievements, however, are still lower in comparison with several other leading countries. For example, the investments in this area by USA, Japan and China are approximately $1000 million, $950 million and $100 million, respectively. To further intensify its efforts to promote this upcoming area, the Government is embarking on plans for a Nano Science and Technology Mission (Nano Mission). Apart from intensifying and multiplying the kind of activities already started, it is planned to launch a variety of educational and HRD programmes, promote entrepreneurship through establishment of business incubators, establish joint centres with international collaboration and put in special efforts towards development and commercialization of nano technology, not only through public private partnerships but also by encouraging and enabling the private sector to invest in, and leverage, this sunrise technology.

(b) and (c): The Government of India has already funded projects worth Rs. 150 crore in the area of nano-electronics. The areas of focus are: novel magnetic and ferroelectric materials, Gallium Nitride devices, silicon-based nanoelectronic devices, etc. The Nano Science and Technology Mission also envisages further investments in this area.